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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,306	07/30/2003	Jeffery S. Blackburn	5702-01043	1883

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EXAMINER

ILAN, RUTH

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/631,306		BLACKBURN, JEFFERY S.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Ruth Ilan		3616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,7-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/25/06</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8, line 12 recites "an interference fit". Claim 2, as amended, already recites an interference fit. This double inclusion is such that it is not clear if the interference fit recited in claim 8 is an additional interference fit or the one previously recited.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852.) Bernau et al. teaches a gas generator including a housing with a base (3) and a cap (2) that are rotatably secured (see col. 2, lines 42-44, and Figure 2A.) The cap includes a peripheral edge (shown with seal element 32 on top of it in Figure 2A) including protruding portions (portion of 11 on top of indent 11e) and the base includes hook members (11d). Bernau et al. does not show the details or other

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views of the bayonet connection, and as such does not specifically disclose that there are a plurality of these corresponding protrusions and hooks spaced about the cap and base. The Examiner takes Official Notice that it is known in the art that rotary bayonet connections include a plurality of such corresponding elements, and that along with the protrusions are corresponding recessed portions and that the connection works by aligning the hooks with the recessed portions, and then turning until the protrusions have been slidably engaged with the hooks. It would have been obvious to one having ordinary skill in the art at the time of the invention that the connection of Bernau et al. would have included a plurality of such elements, in order provide a locking connection. Regarding the limitation "thereby forming an interference fit", the seal (32) is deformed (see for instance, col. 4, line 41) and as such forms an interference fit between the seal and the housing. The Applicant has requested the Examiner to submit evidence in support of the Official Notice regarding the well known use of a plurality of corresponding connections and the alignment and turning. Zabel (US 4,257,394) is cited as factual evidence in support of the Examiner's assertion that it is well known in the art that rotary bayonet connections include a plurality of such corresponding elements. (Note Zabel, Figures 1, 3 and 5.)

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Hill (US 4,590,041.) Bernau et al. is discussed above, and further teaches an annulus (at 38, bottom of 6, see Figure 1) formed centrally and disposed radially in the cap and an igniter within the annulus. Bernau fails to teach that the igniter is adhesively fixed within the annulus. Hill teaches adhesively fixing an igniter

within the annulus (col. 3, line 55) in order to provide a seal. It would have been obvious to one having ordinary skill in the art at the time of the invention to include an adhesive fixing the igniter of Bernau et al., as taught by Hill, in order to provide a seal for the joint between the igniter and the cap.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Bornheim et al. (US 6,655,289 B1.) Bernau et al. is discussed above, and teaches all elements of the claimed invention, but does not disclose a bar code. Bornheim et al. teaches (col. 5, lines 38-45) that it is useful to include a bar code on an initiation device housing in order to have a convenient place for relevant data. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the housing of Bernau et al. to include a bar code, as taught by Bornheim et al. in order to have a convenient location for relevant data.

7. Claims 10, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Schmucker et al. (US 5,525,306.) Bernau et al. is discussed above and as broadly recited teaches that the interference fit is about a periphery, since it external to the base protrusions and internal to the hooks, which is as is disclosed by the applicant. Bernau et al. fails to teach adhesively fixing the base to the cap. Schmucker et al. teaches providing additional adhesive to a rotationally fixed cap and base, used to provide an additional fix (see col. 3, line 55.) It would have been obvious to one having ordinary skill in the art at the time of the invention to provide adhesive to the rotational connection of Bernau et al., in view of the teaching of

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Schmucker et al., in order to provide a more gas tight and stable connection between the cap and the base.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Halford et al. (US 5,454,587.) Bernau et al. is discussed above and fails to teach tapered grooves formed by the inner wall of the hook which can be used to form an interference fit between the hooks and protruding portions. Halford et al. teaches tapered grooves (16,17) in the hook walls of a rotary connection (see col. 3, line 53) that are used to tightly join the rotary connection. It would have been obvious to one having ordinary skill in the art at the time of the invention in view of the teaching of Halford et al. to include a tapered groove formed by one of the inner walls of the hook of Bernau et al. in order to provide a tight connection.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Schmucker et al. (US 5,525,306) and further in view of Hill (US 4,590,041.) Bernau et al. in view of Schmucker is discussed above, and further teaches an annulus (at 38, bottom of 6, see Figure 1) formed centrally and disposed radially in the cap and an igniter within the annulus. Bernau fails to teach that the igniter is adhesively fixed within the annulus. Hill teaches adhesively fixing an igniter within the annulus (col. 3, line 55) in order to provide a seal. It would have been obvious to one having ordinary skill in the art at the time of the invention to include an adhesive fixing the igniter of Bernau et al. in view of Schmucker as taught by Hill, in order to provide a seal for the joint between the igniter and the cap.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Schmucker et al. (US 5,525,306) and further in view of Bornheim et al. (US 6,655,289 B1.) Bernau et al. in view of Schmucker is discussed above, and teaches all elements of the claimed invention, but does not disclose a bar code. Bornheim et al. teaches (col. 5, lines 38-45) that it is useful to include a bar code on an initiation device housing in order to have a convenient place for relevant data. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the housing of Bernau et al. in view of Schmucker to include a bar code, as taught by Bornheim et al. in order to have a convenient location for relevant data

***Allowable Subject Matter***

11. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

12. Applicant's arguments filed 12/07/05 have been fully considered but they are not persuasive. The Applicant asserts that Bernau et al. does not show a plurality of protruding portions and hook members, and that the connection of Bernau et al. is a snap fit connection. The Examiner respectfully disagrees. The snap latches that the Applicant directs attention to by noting col. 4, lines 37-42 are shown in Figure 2. Figure 2a does not show a snap fit connection, but a rotary connection. The elements shown in Figure 2a are specifically called a rotary bayonet connection (see Figure 2a, which is a

different embodiment than Figure 2, and col. 4, lines 57-60.) The Examiner has only relied on Official Notice regarding the plurality of the connections. Regarding the location of the connection, the hook portions (11d) can reasonably be said to be on the base peripheral edge, since they are on the top edge of the flange (7) that extends around the periphery. Analogously, the protruding portions are those areas of the inner wall that protrude outward from the indent 11e. Regarding Halford, the Applicant asserts that Halford does not teach grooves. Halford very specifically calls the tapered space behind the lugs a groove (17.) The groove is tapered because the lug is tapered. Halford is not relied on for the teaching of the base and cap, but rather for the teaching of a tapered groove in a rotary connection. This connection forms a tight fit (see col. 3, lines 53, 54.) It is not necessary that the connection of Halford be a cap and a base, because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Halford et al. is analogous because it solves the same problem as the applicant, that is making a rotary bayonet type of connection tight. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).



***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 571-272-6673.

The examiner can normally be reached on Monday-Friday, 8:30-5:00.

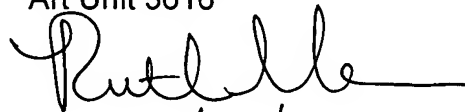
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RI  
2/17/06

Ruth Ilan  
Primary Examiner  
Art Unit 3616

  
2/17/06